Serial No.: 10/509,312
Examiner: Steven Lim

REMARKS

In a March 31, 2010 non-final office action, Examiner cites Josse et al., U.S. Patent No. 6,104,929, ("Josse") in view of Ovesjo et al., U.S. Patent Publication No. 20020160785, ("Ovesjo") and further in view of Eriksson, U.S. Patent Publication Number 20030103478, ("Eriksson) in rejecting independent claims 1 and 11 and cites Josse in view of Ovesjo and Eriksson and further in view of Weissman, U.S. Patent Publication No. 20030188319, ("Weissman") in rejecting independent claim 21 under 35 U.S.C. §103(a). Claims 1, 11 and 21 are independent claims and claims 1-21 are pending in this application.

Applicant respectfully submits that independent claims 1, 11 and 21 distinguish over the cited prior art both individually and in combination because they claim exchanging messages between the RAN of a first technology and the CN of a second technology through a Hybrid Atrium located in the CN. All three independent claims require a MS communicating with a RAN using a first technology and communicating between the RAN of the first technology and the CN of a second technology through a Hybrid Atrium located in the CN.

Applicant states:

> The RAN 120 in turn communicates with a Serving General Packet Radio Service (GPRS) Serving Node (SGSN) 126. The SGSN 126 is a Hybrid SGSN that links the CDMA RAN to the GPRS Core Network. The SGSN 126 also includes a PL layer 122 and a R-P layer 124 as well as a L1 layer 127, a UDP/IP/L2 layer 130 and a GTP-U layer 132.

See patent application, p. 5. Applicant further states:

> A typical wireless network is composed of two sub-networks: a Radio Access Network (RAN) which handles radio related issues such as assigning radio resources to a mobile terminal (or "mobile" in short) upon request for services, and a Core Network (CN) which links the mobile user to wireline networks. Current specification of wireless networks require that the RAN and CN have the same wireless technology in order to provide wireless services. These networks may be referred to as "homogeneous networks." For instance, a GSM mobile will only operate in a wireless network in which its RAN and CN are both GSM wireless technology based. A hybrid network refers to a wireless network with its CN and RAN using different technologies. **For example, the RAN may be based on CDMA2000 standard, while the CN may be based on GSM technology**. Detailed description of a Hybrid Network can be found in co-pending PCT patent application serial no. PCT/US02/35500 which was filed on November 5, 2002 and entitled "Method and System for Providing Wireless Services in a Composite Wireless Network Comprising at Least One Access Network and One Core Network of Different Technologies.", assigned to the same assignee and is hereby incorporated by reference.

[emphasis added]. *See* patent application, p. 4. However, Josse describes communication on the very type of homogeneous network that applicant acknowledges is well-known in the art. Josse requires the same technology in the core network and radio access network and provides no disclosure showing how communication could occur in a wireless network utilizing a core network and a radio access network utilizing different technologies.

Josse states:

> FIG. 1 shows an example cellular telecommunications network having GPRS capability for which the invention is useful. The network of FIG. 1 is shown using GSM-type terminology. While a preferred implementation is described in a GSM context/application, the present invention may be employed in other radio communications networks.

See Josse, column 4, lines 33-38. Josse involves GSM-type terminology and technology. The Um interface, Gn interface and Gb interface are interface names for GSM-type technology. No matter what the radio communication network, the disclosure of Josse only involves a single homogeneous network and is inapplicable to a hybrid network using a core network and radio access network of different technologies and is incompatible with hybrid network technologies.

Ovesjo only discloses a radio access network of a first technology and a second radio access network of a second technology connected to the core network (CN). *See* Ovesjo, FIG. 1 and paragraphs 27-29). The MS (mobile station or mobile terminal) communicates with the RAN and the CN communicates with the RAN through the base station controller (BSC).

The disclosed arrangement of Ovesjo is not the equivalent of the mobile station (MS) communicating with a RAN using a first technology and communicating between the RAN of the first technology and the CN of a second technology through a Hybrid Atrium located in the CN as claimed in claims 1, 11 and 21 and described in conjunction with FIG. 8 of the present patent application. The Hybrid Atrium of the independent claims is

completely missing in Ovesjo. The Hybrid Atrium is separate and apart from the BSC in the present invention. The present application states:

> Fig. 8 is a call flow diagram of a data session activation where the Mobile Station (MS) 800 initiates the activation of the data session. First, an origination message 810 is sent from the MS 800 to the BSC/PCF 802. The BSC/PCF 802 then sends a base station acknowledgement order 812 to the MS 800. The BSC/PCF also sends out a CM service Request (that includes the service option) 814 to a Hybrid Atrium 804. The Hybrid Atrium 804 then sends an Update Location Request 816 to a HLR 808. The HLR 808 then sends an Insert Subscriber Data (QoS) 818 to the Hybrid Atrium 804. In turn, the Hybrid Atrium 804 then sends an Assignment Request (QoS) 820 to the BSC/PCF 802.

See patent application, p. 6. Hence, it is clear that the BSC cannot be the equivalent of the Hybrid Atrium of the independent claims.

Erikkson also does not disclose the mobile station (MS) communicating with a RAN using a first technology and communicating between the RAN of the first technology and the CN of a second technology through a Hybrid Atrium located in the CN as claimed in claims 1, 11 and 21. The cited disclosure of Erikkson relates to a UMTS network system. By definition, the UMTS is a complete network system that covers the UMTS terrestrial radio access network (UTRAN) and the core network (CN) called mobile application part (MAP). The core network service nodes 18 and 20 of Erikkson connect to UTRAN over a radio access network interface. The cited disclosure of Erikkson merely shows a mobile station communicating with a RAN (UTRAN) using a first technology (UMTS) and communicating between the RAN of the first technology and the CN of the

same first technology through the CN. Erikkson does not disclose a CN of a second technology or a hybrid atrium located in the CN of a second technology.

The MSC and GPRS nodes can be reused from the GPRS network in the UMTS network but their functionality change. The MSC is used for circuit switched operations and the SGSN is used for packet switched operations in the GSM network. In UMTS, the MGW takes care of data transfer for both circuit and packet switched networks and the MSC and the SGSN control MGW operations as MSC server and GSN server. Communication is done using the UMTS technology both at the RAN and the CN in UMTS networks including that described in Erikkson.

Dependent claim 2 has also been amended to include a limitation related to the CN being GSM technology and the RAN being CDMA2000 technology to further distinguish from the cited prior art.

Because claims 2-10 depend either directly or indirectly from claim 1 and claims 12-20 depend either directly or indirectly from claim 11, these dependent claims are also allowable for the same reasons independent claims 1 and 11 are allowable.

Serial No.: 10/509,312
Examiner: Steven Lim

CONCLUSION

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims. If there are any matters that can be discussed by telephone to further the prosecution of this Application, Applicant invites the Examiner to contact the undersigned attorney at 512-306-8533 at the Examiner's convenience.

Respectfully submitted,

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